

REMARKS

Dependent claims 13, 14 and 16 have been amended. Claims 1-20 remain in the application. Applicants reserve the right to pursue the original claims and other claims in this application and in other applications.

Claims 13, 14 and 16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Reconsideration is respectfully requested. Claims 13, 14 and 16 have been made broader in scope to obviate the concerns raised in the Office Action. With respect to claim 14, please note that the recited "second tuning current signal" is "applied" to the "tunable light source." Claim 14 does not recite a step of "tuning," or "modifying," as such. Applicants respectfully submit that the claims, as amended, are in full compliance with 35 U.S.C. § 112.

Claims 1, 2 and 19 are rejected under 35 U.S.C. § 102 as being anticipated by Fee. Reconsideration is respectfully requested. Claim 1 recites a "method of operating a distributed Bragg reflector laser device." [Fee fails to disclose or suggest the recited method of operating a "distributed Bragg reflector" laser device,] and the Office Action provides no explanation to the contrary. The diode shown in Fig. 1 of Fee is an external cavity laser (column 2, lines 29+), not a DBR laser device. Accordingly, claim 1 should be allowable over Fee. (A)

Claims 2-10 depend from claim 1 and should be allowable along with claim 1 and for other reasons.

Claim 19 relates to a method of stabilizing a laser device, in which a tuning current is adjusted in response to output power and, simultaneously, the wavelength characteristic of the device is adjusted in response to an optically filtered transmission fraction of the output power. Fee uses a modulation signal 114 to modulate a carrier signal 112. The latter signal 112 is represented by light reflected back and forth from a

multifrequency source 104. [Fee fails to disclose or suggest the simultaneous adjustments recited in claim 19, wherein the applied current is adjusted in response to output power, and the wavelength characteristic is adjusted in response to an optically filtered transmission fraction of the output power.] The Office Action provides no information to the contrary. Accordingly, claim 19 should be allowable over Fee.

Claim 20 depends from claim 19 and should be allowable along with claim 19 and for other reasons.

Claims 11-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Bielas in view of Deacon. Reconsideration is respectfully requested. Claim 11 recites a method of starting-up a tunable light source. The method includes the step of "providing data in a memory representative of mode-hopping values." Advantages associated with making the data in the memory representative of plural mode-hopping values are discussed in the present application starting on page 6. [Bielas and Deacon, even when considered in combination, fail to suggest "providing data in a memory representative of [plural] mode-hopping values."] Contrary to the Office Action, all that Deacon teaches, in relevant part, in the cited sections of columns 2 and 3, is that changing the chip temperature of a DBR laser can lead to mode hopping behavior. Accordingly, claim 11 is believed to be allowable over the references of record.

Dependent claims 12-14 should be allowable along with independent claim 11 and for other reasons.

Independent claim 15 is a method claim that recites the step of "applying a tuning current to [a] laser device as a function of . . . mode-hopping data stored in a memory." [There is nothing in Bielas or Deacon, even when the references are considered together, that suggests storing mode-hopping data in a memory, much less anything to suggest applying a tuning current as a function of such stored data.] Accordingly, claim 15 should be allowable over the cited references.

In the next to last paragraph of page 5, the Office Action contends that providing data values corresponding to mode-hopping values in Bielas could be useful "to more accurately tune" the Bielas device. This contention is not understood. There is nothing in the references to support the notion that changing the data in the Bielas look-up table 36 to mode-hopping data would have a positive relationship to tuning accuracy.

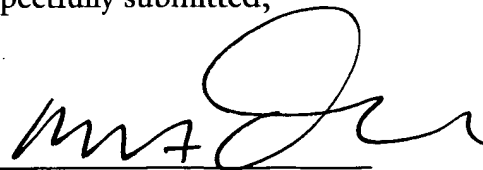
In addition the Office Action argues that "modulation current affects the frequency and hence the mode, so they are all interrelated." This argument, Applicants respectfully submit, is not relevant to the actual method limitations of claim 15. The claim requires that "mode-hopping data" be "stored in a memory." The step of "applying a tuning current to [a] laser device as a function of . . . mode-hopping data" cannot be performed without the stored mode-hopping data.

Dependent claims 16-18 should be allowable along with independent claim 15 and for other reasons.

Allowance of the application with claims 1-20, as amended, is solicited.

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Respectfully submitted,

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MARK-UP VERSION SHOWING CHANGES MADE

13. (Amended) The method of claim 12, further comprising the step of storing [curve] data in a memory.

14. (Amended) The method of claim 13, further comprising the step of applying a second tuning current signal to said tunable light source [as a function of said curve data].

16. (Amended) The method of claim 15, wherein said step of applying said tuning current includes the step of reading [curve] data from a memory.